UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/721,571	AKUNDI ET AL.
	Examiner	Art Unit	
	Thanhnga B. Truong	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 December 2007</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-22</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/10/07</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 03, 2007 has been entered. Claims 1-22 are pending. At this time, claims 1-22 are still rejected.

Information Disclosure Statement

2.   The information disclosure statement (IDS) filed on October 10, 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

3.   Applicant's arguments filed December 03, 2007 have been fully considered but they are not persuasive.

As Applicant has addressed this argument in the previous remark and repeated herein. Applicant argues that:

Neither Slemmer nor Maufer, invidually or in combination, discloses a single device that both bridges and routes incoming packets.

Examiner respectfully disagrees with applicant and still maintain that:

Slemmer teaches the a system for providing uninterrupted communication over a network link includes a multi-port switch (e. g., bridges) that is connected to a first network portion and a second network portion that are communicating with one another. The multi-port switch is also connected to a separate server unit, such as a firewall (e.g., router or gateway) computer. The switch is configured to direct communication signals flowing between the first network portion and the second network portion through the separate server unit for processing during normal operation. When the separate server unit fails, however, the switch is reconfigured so that

communications bypass the separate server unit. In a preferred embodiment, a Ethernet switch having virtual local area network (VLAN) capability is used. Although Slemmer teaches a firewall, Slemmer is silent on the capability of showing the source address (if indeed is inherently in Slemmer). On the other hand, Maufer teaches the source and destination address **(column 1, lines 40-62; column 3, lines 60-67 of Maufer).** In addition, Maufer futher teaches the packets are being routed (see Maufer's abstract and column 16, lines 23-31 of Maufer). Thus, the combination of teaching between Slemmer and Maufer teaches the claimed subject matter.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., discloses *a single device* that both bridges and routes incoming packets) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It appears that Applicant has tried to interpret "within the first network" as a single device. It is not true that a network is compatible with a single device, since many devices can be in one network.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of teaching between Slemmer and Maufer is proper and efficient.

Slemmer and Maufer do not need to disclose anything over and above the invention as claimed in order to render it unpatentable or anticipate. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed

invention from the prior art.   If the prior art structure is capable of performing the intended use, then it meets the claimed limitations.

For the above reasons, it is believed that the rejections should be sustained.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

      a.   _Referring to claim 13:_

        i.   Claim 13 recites "A computer program embodied in a machine-readable medium, the computer program comprising instructions for controlling a firewall to perform the following steps: receive first packets and second packets at a first device; determine, at the first device, that the first packets should be bridged, the first packets having a first source address and a first destination address within the first network; apply a first screening process to the first packets at the first device; determine, at the first device, that the second packets should be routed; and apply a second screening process to the second packets at the first device." The claim is directed toward a software program, and this is a non-statutory subject matter. Furthermore, applicant has pointed out in the specification (see page 17, lines 16-19 of specification) **"The invention may also be embodied in _a carrier wave traveling over an appropriate medium such as airwaves, optical lines, electric lines, etc._"** which clearly including intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they are conveyed.   Therefore, claim 13 recites a non-statutory subject matter.

      b.   _Referring to claims 14-16:_

i.   These claims are dependent claim of 13, thus they are

rejected with the same rationale applied against claim 13 above.

b.   *Referring to claims 1-12, and 17-22:*

i.   These claims consist a firewall to implement claim 13, thus

they are rejected with the same rationale applied against claim 33 above. Since claim

13 is the evidence, therefore, claims 1-12 and 17-22 are also non-statutory.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Slemmer (US 6,240,533 B1), and further in view of Maufer et al (US 7,143,188

B2).

a.   *Referring to claim 1:*

i.   Slemmer teaches a firewall, comprising:

(1)   a first port configured for communication with a first

device within a first network **(see Figures 4 & 5 and further details on column 4,
line 52 of Slemmer);**

(2)   a second port configured for communication with a

second device within the first network **(see Figures 4 & 5 and further details on
column 4, lines 52-53 of Slemmer);**

(3)   a third port configured for communication between the

first network and a second network **(see Figures 4 & 5 and further details on
column 4, lines 51-58 of Slemmer); and**

(4)   a processor configured to: determine that a first portion of the incoming packets should be bridged, the first portion having a first source address and a first destination address within the first network **(column 4, lines 7-32 of Slemmer);**

(5)   apply a first screening process to the first portion **(column 4, lines 32-41 of Slemmer);**

(6)   determine that a second portion of the incoming packets should be routed, the second portion having a second source address or a second destination address outside the first network; and apply a second screening process to the second portion **(column 4, lines 42-67 through column 5, lines 1-10 of Slemmer).**

ii.   Although Slemmer teaches a firewall, Slemmer is silent on the capability of showing the source address (if indeed is inherently in Slemmer). On the other hand, Maufer teaches the source and destination address **(column 1, lines 40-62; column 3, lines 60-67 of Maufer).**

iii.   It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1)   have modified the invention of Slemmer (if indeed is not inherently) with the teaching of Maufer to form a packet **(column 3, lines 59-60 of Maufer).**

iv.   The ordinary skilled person would have been motivated to:

(1)   have modified the invention of Slemmer (if indeed is not inherently) with the teaching of Maufer to enhanced security for communication over a network, and more particularly to integration of Network Address Translation (NAT) with Internet Protocol Security (IPSec) **(column 1, lines 8-11 of Maufer).**

b.   *Referring to claim 2:*

i.   Slemmer further teaches:

(1)   wherein the at least one processor is configured to control traffic between the first device and the second device according to a spanning tree protocol **(column 3, lines 54-67 through column 4, lines 1-3 of Slemmer)**.

c.   *Referring to claim 3:*

i.   Slemmer further teaches:

(1)   wherein the at least one processor is configured to control traffic between the first device and the second device according to one or more fields in a layer 2 header of a packet **(column 3, lines 54-67 through column 4, lines 1-3; column 4, lines 30-32 of Slemmer)**.

d.   *Referring to claim 4:*

i.   Slemmer teaches:

(1)   wherein the at least one processor is configured to perform an initial check on a packet, wherein the procedures of the initial check are selected from the group consisting of checking for broadcasting, multicasting and Internet protocol fragments **(column 4, lines 59-67 through column 5, lines 1-11 of Slemmer)**.

e.   *Referring to claim 5:*

i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

(1)   wherein the at least one processor is configured to apply the first screening process according to security policies implemented at one or more of layers 3 through 7 **(column 2, lines 45-67 of Maufer)**.

f.   *Referring to claims 6-7:*

i.   These claims have limitations that is similar to those of claim 5, thus they are rejected with the same rationale applied against claim 5 above.

g.   *Referring to claim 8:*

          i.   This claim has limitations that is similar to those of claim 1, thus it is rejected with the same rationale applied against claim 1 above.

        h.   *Referring to claims 9-12:*

          i.   These claims consist a method of implementing a firewal in claim 1, thus they are rejected with the same rationale applied against claims 1, 4-5 above.

        i.   *Referring to claims 13-16:*

          i.   These claims consist a computer program embodied in a machine-readable medium, the computer program comprising instructions for controlling a firewall to implement claim 1, thus they are rejected with the same rationale applied against claims 1, 4-5 above.

        j.   *Referring to claim 17:*

          i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

          (1)   further comprising a control plane configured to build a bridge table **(see figures 5A-B and more details in column 3, lines 64-67; column 5, lines 57-67 through column 6, lines 1-6 of Maufer).**

        k.   *Referring to claim 18:*

          i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

          (1)   wherein the control plane is further configured to inspect one or more of DHCP, ARP or OSPF packets **(column 1, lines 40-48; column 7, lines 2-12 of Maufer).**

        l.   *Referring to claim 19:*

          i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

      (1)   wherein the control plane is further configured to builds a routing table **(see figures 5A-B and more details in column 3, lines 64-67; column 5, lines 57-67 through column 6, lines 1-6 of Maufer).**

    m.   *Referring to claim 20:*

      i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

      (1)   further comprising a data plane configured to enforce screening policies **(column 2, lines 45-67 of Maufer).**

    n.   *Referring to claim 21:*

      i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

      (1)   wherein the data plane is further configured to determine whether to bridge or route packets **(column 6, lines 7-21 of Maufer).**

    o.   *Referring to claim 22:*

      i.   The combination of teaching between Slemmer and Maufer teaches the claimed subject matter. Maufer further teaches:

      (1)   wherein the data plane is further configured to rewrite packet headers before transmitting packets **(column 2, lines 45-67).**

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

TBT

January 20, 2008

THANHNGA TRUONG
PRIMARY EXAMINER